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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,805	03/06/2002	Marion A. Keyes IV	06005/38044	8371
4743	7590	10/06/2004	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP 6300 SEARS TOWER 233 S. WACKER DRIVE CHICAGO, IL 60606			BARNES, CRYSTAL J	
			ART UNIT	PAPER NUMBER
			2121	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/091,805	Applicant(s) KEYES ET AL.	
	Examiner Crystal J. Barnes	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
 4a) Of the above claim(s) 14-31 and 35-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 32-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/13/02 & 10/8/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a Non-Final Office Action in response to Election Requirement received on 31 August 2004.

Election/Restrictions

2. Applicant's election without traverse of Claims 1-13 and 32-34 in the reply received on 31 August 2004 is acknowledged.
3. Claims 14-31 and 35-52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply received on 31 August 2004.

Information Disclosure Statement

4. The information disclosure statements (IDS) submitted on 13 August 2002 and 08 October 2003 are being considered by the examiner.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-9, 11, 13 and 32-34 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,741,174 B2 to Rhoades et al.

As per claim 1, the Rhoades et al. reference discloses an appendable device, comprising: a housing (see column 4 lines 57-63, "housing 65") adapted to be mounted to a surface (see column 3 lines 40-50, "compartment"); a memory (see column 4 lines 57-61, "memory module 82") disposed within the housing ("housing 65"); an input/output interface ("connector 90") disposed within the housing ("housing 65"), wherein the input/output interface ("connector 90") is adapted to communicate with one of a sensor (see column 3 lines 26-39, "sensors 15") and a control output (see column 4 lines 57-62, "camera 60") operatively coupled to the

appendable device (see column 3 lines 40-41, "sensor agent 20"); and a processor (see column 4 lines 57-61, "general computing device or processing unit 70") disposed within the housing ("housing 65") and communicatively coupled to the memory ("memory module 82"), wherein the processor ("general computing device or processing unit 70") is programmed to communicate with the input/output interface ("connector 90") and to communicate information (see column 6 lines 63-67, "sensor data") related to the one of the sensor ("sensors 15") and the control output, as the information ("sensor data") becomes available, to another device ("user interface 35, portable device 40") via a communication network (see column 3 lines 52-53, "local area network or first network 30" and column 5 lines 25-30, "wireless communication").

As per claim 2, the Rhoades et al. reference discloses the processor (see column 4 lines 14-19, "general computing device or processing unit 70") is further programmed to enable the appendable device ("sensor agent 20") to perform at least a part of a closed-loop process control algorithm ("evaluate the data received").

As per claim 3, the Rhoades et al. reference discloses the processor ("general computing device or processing unit 70") is further programmed to

diagnose a condition (see column 4 41-48, "sensor 15 diagnostics") associated with one of the appendable device and a process ("sensor 15 diagnostics") associated with the appendable device ("sensor agent 20").

As per claim 4, the Rhoades et al. reference discloses the processor ("general computing device or processing unit 70") is further programmed to detect an alarm condition (see column 4 lines 14-19, "alarm criteria") and to send alarm information (see column 4 lines 24-27, "alarm message") to the other device (see column 4 lines 28-32, "user interface 35") via the communication network (see column 4 lines 24-31, "first network 30") in response to detecting the alarm condition ("out of tolerance").

As per claim 5, the Rhoades et al. reference discloses the other device (see column 7 lines 19-25, "portable device 40") is a wireless handheld device ("personal digital assistance, cellular phone, laptop computer, or any other portable device having wireless communication capability").

As per claim 6, the Rhoades et al. reference discloses the processor ("general computing device or processing unit 70") is further programmed to enable the appendable device (see column 7 lines 1-6, "sensor agent 20") to function as a

part of a communication path ("sub-network or second network 45") for another appendable device ("sensor agents 20").

As per claim 7, the Rhoades et al. reference discloses the one of the sensor and the control output ("camera 60") operatively coupled to the appendable device ("sensor agent 20") is disposed within the housing ("housing 65").

As per claim 8, the Rhoades et al. reference discloses the communication network (see column 4 lines 6-10, "first network 30") uses one of a wireless ("wireless network") and a hardwired ("hardwired system") communication technique.

As per claim 9, the Rhoades et al. reference discloses the one of the wireless ("wireless network") and the hardwired ("hardwired system") communication technique includes the use of an Internet (see column 5 lines 29-35, "wireless communication protocols").

As per claim 11, the Rhoades et al. reference discloses further including a power source (see column 4 lines 57-61, "power support system 85") disposed within the housing ("housing 65"), wherein the power source ("power support system 85") uses one of a capacitor, a battery ("battery 75"), light and a magnetic field to provide power to the appendable device ("sensor agent 20").

As per claim 13, the Rhoades et al. reference discloses the housing is adapted to be mounted within one of a rugged environment (see column 3 lines 49-51, "aircraft, spacecraft, factory, subway, train") and a hazardous environment ("power generating station").

As per claim 32, the Rhoades et al. reference discloses an appendable device, comprising: a housing (see column 4 lines 57-63, "housing 65") adapted to facilitate surface (see column 3 lines 40-50, "compartment") mounting of the appendable device ("sensor agent 20"); a power source (see column 4 lines 57-61, "power support system 85") disposed within the housing ("housing 65"); a transceiver (see column 5 lines 25-35, "antennae 80") disposed within the housing ("housing 65"); an antenna ("antennae 80") coupled to the transceiver ("antennae 80") and adjacent to the housing ("housing 65"); a memory (see column 4 lines 57-61, "memory module 82") disposed within the housing ("housing 65"); an input/output interface ("connector 90") disposed within the housing ("housing 65"); a sensor (see column 3 lines 26-39, "sensors 15") coupled to the input/output interface (see column 5 lines 17-21, "connector 90"); and a processor (see column 4 lines 57-61, "general computing device or processing unit 70") communicatively coupled to the memory ("memory module 82"), the transceiver ("antennae 80") and

the input/output interface ("connector 90"), wherein the processor ("general computing device or processing unit 70") is adapted to execute software (see column 6 lines 40-42, "computer software program,") stored in the memory ("memory module 82") to sense a parameter (see column 6 lines 63-64, "data") using the sensor ("sensor 15") and to use the transceiver ("antennae 80") and the antenna ("antennae 80") to transmit information (see column 6 lines 65-67, "sensor data") associated with the sensed parameter ("sensor data") to another device ("user interface 35, portable device 40") via a wireless communication network (see column 5 lines 25-30, "wireless communication") as the information ("sensor data") becomes available.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 10 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,741,174 B2 to Rhoades et al. in view of USPN 5,741,966 to Handfield et al.

As per claim 10, the Rhoades et al. reference discloses further including a power source (see column 4 lines 57-61, "power support system 85") disposed within the housing ("housing 65") and adapted to generate power in response to vibration of the surface.

The Rhoades et al. reference does not expressly disclose further including a power source adapted to generate power in response to vibration of the surface.

The Handfield et al. reference discloses
(see column 11 lines 33-36, "An alternate source of power for the detector/transmitter units 10 ... the piezo-electric element could vibrate generating power to the detector/transmitter.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the sensor agent taught by the Rhoades et al. reference to include the piezo-electric element taught by the Handfield et al. reference.

One of ordinary skill in the art would have been motivated to modify the sensor agent to include the piezo-electric element to provide an alternate source of power for the sensor agent.

As per claim 34, the rejection of claim 10 is incorporated and further claim 34 contains limitations recited in claim 10; therefore claim 34 is rejected under the same rationale as claim 10.

9. Claims 12 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,741,174 B2 to Rhoades et al. in view of US Pub. No. 2004/0087894 A1 to Flaherty.

As per claim 12, the Rhoades et al. reference does not expressly disclose the housing is adapted to be mounted to the surface using one of an adhesive, a screw, a clamp, a tie-wrap and a magnet.

The Flaherty reference discloses

(see page 6 [0076], "The device 10 also includes a secondary adhesive layer 202 ... the secondary adhesive layer 202 allows the device 10 to be attached, removed and attached again ...")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the sensor agent taught by the Rhoades et al. reference to be adapted to be mounted on a surface using the adhesive layers taught by the Flaherty reference.

One of ordinary skill in the art would have been motivated to modify the sensor agent to be adapted to be mounted on a surface using the adhesive layers to allow the sensor agent to be attached, removed and attached again providing a semi-permanent attachment.

As per claim 33, the rejection of claim 12 is incorporated and further claim 33 contains limitations recited in claim 12; therefore claim 33 is rejected under the same rationale as claim 12.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to remote monitoring/control in general:

USPN 6,496,695 B1 to Kouji et al.

USPN 6,714,977 B1 to Fowler et al.

US Pub. No. 2002/0019712 A1 to Petite et al.

US Pub. No. 2002/0042266 A1 to Heyward et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is 703.306.5448 or 571.272.3679 after 14 October 2004. The examiner can normally be reached on Monday-Friday alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703.308.3179 or 571.272.3687 after 14 October 2004. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJB
28 September 2004



Anthony Knight
Supervisory Patent Examiner
Group 3600